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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,223	09/15/2003	Masakazu Koizumi	10873.1301US01	2121

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EXAMINER

NGUYEN, CHAU N

ART UNIT PAPER NUMBER

2831

DATE MAILED: 05/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/663,223

Applicant(s)

KOIZUMI ET AL.

Examiner

Chau N Nguyen

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/19/03 & 2/6/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Objections

1. Claim 5 is objected to because of the following informalities: in claim 5, line 2, change "on" to --or--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 8 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Hotta et al. (6,245,175).

Hotta et al. discloses an anisotropic conductive elastic connector (Figs 1a and 1b), comprising plural linear conductors (2) arranged in the thickness direction of an insulation elastic resin (1), wherein an electric insulation coating (3) having a withstand voltage of 1 V/ μ m or more (the material being polyimide, polyester resin, or polyurethane, see col. 5, lines 8-11, col. 6, line 10) is formed to a thickness of 1 μ m or more (col. 10, lines 30-31) on a side face of the linear

conductor, and the linear conductors being arranged with a pitch interval of 0.01mm (col. 5, line 56) (re claim 1). Hotta et al. also discloses the end of the linear conductors being exposed from the insulation elastic resin material and having a length that is substantially the same as the thickness of the insulation elastic resin material (re claim 2), the linear conductors being copper wires (re claim 8), and at least one end of the linear conductors being sliced together with the insulation elastic resin (re claim 9).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hotta et al. in view of Inasaka (5,364,276).

Claims 3-5 additionally recite corrosion inhibiting plating being provided on an end face of the linear conductor, wherein the corrosion inhibiting plating being a gold plating or nickel plating. Inasaka discloses an anisotropic conductive connector comprising linear conductors, wherein an end face of the linear

conductors is provided with a gold plating (6, Fig. 5). It would have been obvious to one skilled in the art to provide an end face of Hotta et al.'s linear conductor with a gold plating to provide electrical connection to the linear conductor as taught by Inasaka (col. 4, lines 4-6). Regarding the limitation of "electroless plating", it has been held that during examination, the patentability of a product claim is determined by the novelty and nonobviousness of the claimed product itself without consideration of the process for making it which is recited in the claim. In re Thorpe, 227 USPQ 964.

6. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hotta et al. in view of Doi (6,103,359).

Claim 6 additionally recites the arrangement density of the linear conductors being different depending on a predetermined conducting current capacity. Doi discloses an anisotropic conductive connector in which the arrangement density of the linear conductors being different depending on a predetermined conducting current capacity (Figs 1-3, 6 and 7). It would have been obvious that depending on the specific use of the resulting connector, one skilled in the art would arrange the linear conductors in different densities to meet the predetermined conducting current capacity as taught by Doi.

Claim 7 additionally recites the insulation elastic resin being a silicone rubber. Doi discloses an anisotropic conductive connector comprising an insulation elastic resin which is silicone rubber (col. 1, lines 66-67). It would have been obvious to one skilled in the art to use silicone rubber as taught by Doi for the insulation elastic resin of Hotta et al. since silicone rubber is a known electrical insulation material which has excellent dielectric properties.

Cited Art

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nose, Munro, Yamaguchi et al., Isobe et al. and Omotani disclose anisotropic conductive connectors having linear conductors.


Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau N Nguyen whose telephone number is 571-272-1980. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on 571-272-2800 ext 31.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Chau N Nguyen
Primary Examiner
Art Unit 2831